



Introduction to Hydronic Testing, Adjusting, & Balancing

Add Hydronic TAB to your service offerings

Have you always wanted to balance hydronic systems you install and/or service, but have not been able to find practical, hands-on, step-by-step training to do it right? Is your company already performing hydronic TAB, but you want to get more technicians trained? This is the right class for you!

First-timers and seasoned professionals who attend this course will gain a firm understanding of the most current hydronic testing and balancing practices. This NCI-exclusive two-day course is also a perfect stepping stone for technicians working towards achieving National Balancing Council certification. “Introduction to Hydronic Testing, Adjusting and Balancing” is an intensive training program that begins with the very basics, then moves up to advanced testing and balancing procedures required for everyday applications.

Training includes an even mix of classroom and hands-on experiences

The course consists of 50% classroom training and 50% hands-on exercises where students use a variety of instruments on various systems, facing situations and problems they will encounter in the field. The course takes place in a low-pressure learning environment, as there is no certification exam. This allows the participants to simply focus on the material and hands-on learning.

Who Should Attend?

This class provides just the right training for testing and balancing personnel as well as field service technicians and technical managers. Facilities management personnel and design teams will also benefit greatly from this practical training.



**Courses Qualify for NATE
& Most State CEUs**



Hydronic System Testing, Adjusting, & Balancing

Benefits:

In this two-day non-certification class, HVAC professionals will learn to:

- Troubleshoot hydronic systems
- Select and size pumps and pipes
- Understand pump flow, balancing, and operation
- Determine coil/flow by pressure drop, by Cv rating, by heat transfer using BTU calculations and more
- Create hydronic TAB reports that customers can easily understand.



Benefits:

- Opens the door to increased sales and customer loyalty through professional testing, adjusting, balancing (TAB), and diagnostics
- Prepares technicians for day-to-day operations in the field.
- Prepares your field service personnel for taking on the challenges of NBC certification in the future
- Provides a stress-free (no certification exams), hands-on learning environment
- Enables your field service professionals to stay current on hydronic TAB best practices.

Deliver high quality testing, adjusting, and balancing services, and produce professional reports and documentation to differentiate your company from your competition!

Agenda:

DAY 1: Hydronics Overview

- How to prepare for a hydronic balancing project
- Overview of different types of hydronic equipment and piping systems
- Hydronic TAB reporting requirements
- Introduction to pumps, including how to use a pump curve
- Pump laws and their application in the field
- Pump selection and pipe sizing methods
- Determine system requirements.

DAY 2: Testing, Balancing, Reporting

- Determine hydronic flow using coil pressure drop
- Determine hydronic flow using Cv ratings
- Determine hydronic flow using Heat transfer/Btu calculations
- Quickstep method for balancing coils and flow stations
- Report coil/flow station TAB
- Finalize hydronic test and balance
- Required forms, overall content, remarks, and other data necessary for hydronic TAB report.

Hands-on activities and experience are interspersed throughout both Day 1 and Day 2 training.

“This is the most valuable training organization I have ever been a part of. They are passionate and their training is among the best taught that I have ever taken. I not only value their training but their continuous support as well. This helps to create a path to success for everyone involved.”

– Dana Walsh, Direct Flow, Newfoundland, Canada

Who Should Attend?
Managers, Installers,
Service Technicians,
Facilities Professionals,
and Commercial
Air Balancers

Call 800-633-7058



NCI's Hydronic Training Package Includes the following tools:

- Pressure Drop Calculator
- Manufacturer Hydronic Valve Charts
- Hydronic Troubleshooting Guide
- Hydronic System Sizing Guide



Frequently Asked Questions

Q: Is this a certification class?

No. This class is open to all interested in learning about hydronic testing, adjusting, and balancing. It can be a stepping stone toward NBC certification.

Q: Do I need to bring my own tools and instruments to this class?

No. All necessary tools and instruments will be provided.

Q: What are the start and end times of the class and is lunch included?

The typical NCI training day runs from 8:00 AM to 5:00 PM. Light refreshments and lunches are included.

Who is NCI?

NCI (National Comfort Institute, Inc.) is the world leader in HVAC System Performance training and Air Balancing. We created the industry's best practices, processes, and forms and have been teaching them for decades.

What makes NCI's approach different? We show you how to thoroughly test and diagnose the system using practical, easy-to-follow methods so you'll know exactly what to do to provide your customers with optimum comfort and energy efficiency.

NCI coined the phrase Performance-Based Contracting™, a unique approach to managing a contracting business through accountability and measurable results. During the past two decades, NCI has trained and certified more than 25,000 HVAC industry professionals.

For more information about NCI, please call 800-633-7058 or visit www.nationalcomfortinstitute.com.



Additional Educational Opportunities from NCI:

- **NCI Commercial/Residential Air Balance Certification**
- **Combustion Performance & CO Safety**
- **Performance-Based Selling**
- **Large Commercial Air and Hydronics Balancing (National Balancing Council)**

- **Residential HVAC System Performance Certification**
- **Residential HVAC System Redesign and Renovation**
- **Airflow Testing & Diagnostics Implementation**
- **Online Training (NCI University/Webinars)**
- **Onsite Training**
- **Membership**



Register now and discover the Performance-Based Contracting™ Difference!